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From Global Metrics to Local Priorities: Rethinking Academic Journal Rankings for an Autonomous Algerian Framework

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Abstract

Algeria, like other developing countries, aims to build strong institutions that produce knowledge with added value to achieve sustainable development in the different fields. Regarding the academic scientific research, several challenges related to the publishing terrain force researchers to deal with the requirements of international publishing. Thus, a critical tension arises between Algerian researchers' pursuit of international recognition and national contextual demands for sovereignty over scientific output. Despite the ASJP's modest but tangible gains, this paper highlights the need to establish a national evaluation system that ensures the efficient use of scientific resources, their alignment with national contextual needs, and their impact on the quality of scientific research. It adopts an analytical and reflective approach, drawing on the experiences of selected developing countries that have achieved a respected position in scientific research. Furthermore, some thoughtful recommendations regarding knowledge environment and local capabilities, economic needs and societal imperatives are put forward.

Keywords: scientific research; publishing rankings; challenges; Algerian context; national framework

ملخص:

تسعى الجزائر، كغيرها من الدول النامية، إلى بناء مؤسسات قوية تُنتج المعرفة ذات القيمة المضافة لتحقيق التنمية المستدامة في مختلف المجالات. وفيما يتعلق بالبحث العلمي الأكاديمي، العديد من التحديات المتعلقة بمجال النشر تفرض على الباحثين التعامل مع متطلبات تصنيفات النشر الدولية. وبالتالي، تكشف الإشكالية عن التوتر القائم بين سعي الباحث الجزائري إلى الاعتراف الدولي والانخراط في مجتمع المعرفة العالمي، ومتطلبات السياق الوطني الهادفة إلى تحقيق السيادة على الإنتاج العلمي. ورغم ما حققته المنصة الجزائرية للمجلات العلمية من مكاسب متواضعة لكنها ملموسة، تؤكد هذه الورقة ضرورة إرساء نظام تقييمي وطني يضمن الاستخدام الفعال للموارد العلمية وتكييفها مع الاحتياجات الوطنية، مستلهمة في ذلك تجارب بعض الدول النامية الناجحة في مجال البحث العلمي. وعلاوة على ذلك، يتم طرح بعض التوصيات المدروسة فيما يتعلق بالبيئة المعرفية والقدرات المحلية والاحتياجات الاقتصادية والضرورات المجتمعية.

كلمات مفتاحية: البحث العلم؛ تصنيفات النشر؛ التحديات؛ السياق الجزائري؛ الإطار الوطني.

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INTRODUCTION

The academic scientific research in Algeria encounters several structural and functional challenges and issues, chiefly marked by the insufficiency of local mechanisms for assessing scientific research and improving its quality, while ensuring its relevance to national and societal contexts. Notwithstanding the adoption of a national classification for scientific journals into three categories (A, B, C), based on different criteria such as regular publication, international accessibility, availability of peer review, and national/international academic supervision; This classification which is characterized by a simplified organizational framework and restricted criteria, may not achieve its intended goals, as enhancing the quality of scientific production and the efficacy of the research system, or even handling the large number of research works, but it may serve other administrative procedural purposes (as academic grade promotions and PhD defense disposition) (Mouzai & Benhasine, 2020). Nevertheless, the implementation of the ASJP (Algerian Scientific Journal Platform) has yielded modest but perceptible advantages. This paper highlights the necessity of establishing a national evaluation system that ensures the efficient use of scientific resources, their alignment with national contextual needs, and their impact on the quality of national scientific research. Accordingly, this analytical reflective paper draws inspiration from experiences of some developing countries that have managed to attain a respectable status in the field of scientific research.

This fact has led to the emergence of significant operational issues, including the disparity in research quality and its disconnection from the requirements of national development. Moreover, the academic community has become increasingly constrained by bureaucratic practices often leading to excessively long timelines for article acceptance. These factors along with other challenges, have negatively affected the Algerian universities in global rankings resulted in a remarkable decrease in the scientific production. (Nezai *et al.*, 2022). These data imposed on the academic community call for the necessity of seriously considering the establishment of new national mechanisms for classifying research and scientific journals. Those reforms will be directing the scientific research towards a closer connection with the Algerian developmental context and national sovereign strategies, while strictly adhering to scientific methodologies, ethics and standards.

Furthermore, alongside our proposal in this research paper to establish an autonomous national Algerian classification that connect its platform and research projects in a comprehensive framework, another critical fact arises concerning global rankings, which have turned the academic world into a competitive one where the winner is the one with the highest citations. This system, referred to as global, has special mechanisms whose stated objectives is to classify research, index scientific journals, and elevate scientific research to high levels of quality and efficiency. However, on the other hand, it is also an entrepreneurial and investment system par excellence, consisting of companies that monopolize data and handle research selectively, focusing on the commercial aspect and the profits it generates from reading and downloading fees. (Van Ballen *et al.*, 2020).

In light of these contradictions that intersect within a research environment still in its foundational stages in Algeria, the researcher finds himself compelled to deal with the requirements of international rankings, which are often challenging, especially when compared with the counterparts in developed countries, whether in terms of financial resources or available intellectual materials in addition to the structural and contextual differences (Slimani, Douli, & Benyamin, 2022). Accordingly, a central issue has arisen related to the tension between the Algerian researcher's need for international recognition and his urgent pursuit of engaging, even individually, in the global knowledge market, and the requirements of the national context that calls for achieving knowledge sovereignty over scientific production and directing it towards serving national priorities and development projects. Therefore, this article has inspired by the experiences of some developing countries that have managed to attain a respectable position in the field of research.

On that account, this apparently straightforward problematics leads to pose the following queries:

- What is the impact of the international rankings on the process and progress of scientific research in Algeria?
- How can Algeria benefit from other countries' experiences to manage publication problems and challenges that researchers face at different levels?
- What criteria can Algeria adopt to develop an effective scientific publishing system which is linked to its national developmental context?

In this research paper, a critical analytical methodology is adopted by presenting and extrapolating some previous and contemporary studies to ensure a balanced approach, followed by conclusions and proposing practical criteria that can be applied in reality.

1. Platforms for research rankings between academic value and commercial Motives

In recent years, universities frequently boast about the quantity of their scientific publications that fall into Q1-Q4 categories, as well as the number of their affiliated researchers that publish in journals indexed in global databases like Scopus and Clarivate. Undoubtedly, these indicators represent a facet of academic excellence in the global context, and it is natural for universities to consider their achievements worthy of pride, given the increasing reliance on these platforms and their standards in the international assessment of scientific research. In this regard, Bourdieu (2001) warns in his book *Science de la science et réflexivité* about the danger of economic influence and the subjugation of science to entrepreneurial and commercial interests.

Peer-reviewed scientific publishing, in its essence, focuses on original scientific achievements that add value to human knowledge in general, or transform practical information in a specific field of knowledge into something applicable and investable in

certain life domains. Thus, these achievements are evaluated by committees of experts according to strict criteria that focus on the content and the form, their impact on the scientific community and their applicability and utility in reality. However, the publishing acceptance is somewhat challenging with the expanded conditions of scientific publishing platforms like Scopus and Clarivate which are regarded as the highest regulatory authorities to decide upon the metrics as the impact factor (Seglen, 1997).

In a study conducted by He *et al.* (2023) on scientific articles published during the COVID pandemic era, showed that the abundance of articles on the pandemic and the numerous citations on the subject significantly increased the impact factor of journals. However, if those articles were removed, the journals would lose a substantial portion of their impact. This distortion discovered by the study clearly demonstrates the fragility of traditional indicators. The study also revealed how indicators rise due to the dominance of certain scientific fields over others.

The increasing focus on academic rankings, based on citation metrics such as the “General Impact Factor (GIF)” and “Source Impact Factor (CiteScore)”, has gradually transformed academic publishing into a competitive market governed by these quantitative indicators (Anwar, 2021). Paulus *et al.* (2018) indicated in a study based on inductive and deductive approaches that relying on various impact indicators as the sole measure of research quality or researcher efficiency is inaccurate and may reflect various misleading conclusions.

The global scientific research system has witnessed the emergence of scientific dynamics and evaluation systems that rely on quantitative indicators, such as rankings based on the number of citations or impact factors. This was accompanied by the emergence of journals that rely on commercial models, dealing with scientific research according to financial criteria, which led to noticeable changes in academic publishing practices, where some decisions regarding the acceptance or rejection of research became linked to economic or profitability potentials, not just the scientific or intellectual value of the published content (Ramírez-Castañeda, 2020). However, these phenomena can be interpreted from an anthropological and civilizational perspective, as part of the complexities of the cognitive and institutional structure in advanced societies, where ‘complexity is considered a stage in the development of civilized systems’ (Wand & Hoyer, 2023).

These shortcomings have prompted the academic community to consider improving the methods of research evaluation by funding areas and academic laboratories. Many studies have called for the adoption of alternative metrics (Altmetrics) that take into account the social impact of research and its interactive aspect (field-society-individual) within its local and humanitarian contexts (Taylor, 2023). More formal and institutional proposals have also emerged, such as the San Francisco Declaration on Research Assessment (DORA) in 2013, which emphasized the need to adopt more comprehensive criteria beyond citation counts, such as research quality and its impact on society. (Cagan, 2013).

2. Consequences and Outcomes

Furthermore, the transformation of science into a commodity and academia into a market governed by the law of supply and demand besides the authority of money instead of rigors of methodological and epistemological critique has produced many disparities, including but not limited to:

- Geographical and regional differences have revealed a clear gap in publishing opportunities among researchers, where publications in high-ranking journals are taken into account, while research originating in other journals and regions does not gain a great importance (Skopec, 2020).
- Linguistic bias is obvious in what is seen as ‘language of science’, where non-English-speaking researchers face several difficulties in publishing in high-ranking journals, which negatively affect the factor of diversity in research contexts (Ramirez-Castañeda, 2020).
- Consequently, among the outcomes which are considered as unethical: the emergence of predatory journals and fake impact factors that seize research works and turn them into profit-oriented ventures. Martinino *et al.* (2024) in a study conducted with more than (900) participants from (58) countries, confirmed that those journals that focus on profits without considering the quality of research or its genuine connection to the literature of scientific research have become a real threat to the integrity of researchers and the future of scientific research, necessitating institutional intervention to limit their impact.

3. Scientific Research: reality, and contextual dimension

Since knowledge and then renaissance are cumulative practices that start from the peculiarities and needs of society (Bennabi, 1947), effective handling of local cognitive and social challenges requires integrating scientific research within a context that aligns with the national environment, in terms of cognitive capabilities, economic needs, and societal necessities. In this context, adopting research evaluation models imported from different academic environments, especially those that originated within mature knowledge contexts and advanced research institutions, may lead to structural paradoxes within the national research system, affecting the scientific vision and its locally determined objectives.

Despite providing subscriptions to these platforms by the Algerian state through the SNDL portal, the extent of their utilization by the academic community is very modest compared to the funds spent, regardless of the technical difficulties and fluctuations experienced by this portal which became no longer accessible (Ministry of Higher Education and Scientific Research, 2025). However, the closure of SNDL portal might cause various problems for researchers to reach target scientific resources.

Based on those consequences, it is highly required to establish a national evaluation system for scientific research that takes into account the efficiency of utilizing scientific

resources, their adaptability to national contextual needs, and their impact on the quality of national scientific research. On another hand, financial resources can be managed more efficiently and directed towards research fields that produce the highest added value. Therefore, Algeria needs to think about linking scientific research to local development through building a national research system with its own evaluation criteria. Pursuing global rankings that do not recognize the peculiarities of research in Algeria will only lead to further external and internal marginalization. In this regard, many valuable research works are rejected because they do not align with the interests of the journals/readers, or do not meet the standards and requirements of the global market and fields as for applied research, especially with the shortage of recognized Arab journals classified within the accredited platforms, as an Al-Fanar Media analysis reveals. (Abd Elrazek, 2025).

The reader may think that this paper advocates for isolationism and calls for rejecting the global standards, but what is actually meant is the emphasis on the need to develop a local scientific environment that considers research and cultural specificities, while simultaneously adhering to the methodological and epistemological standards globally recognized in the evaluation of scientific research. Excessive reliance on international rankings, despite their importance in some contexts, does not necessarily guarantee a tangible impact at the level of local knowledge or research development, especially within totally different environments.

Algeria which is striving to achieve a genuine economic revival, this goal cannot be separated from a comprehensive academic revival that ensures a productive research environment, rooted locally, globally open, and capable of making a tangible contribution to innovative solutions and the development of knowledge relevant to the national reality. To accomplish this goal, inspiration can be drawn from successful experiences in the field of national and local citizen scientific publishing, such as those of Iran, Turkey, and Brazil.

- For Iran, the academic sector has directed research to align with local needs and priorities. During this period, Iranian national journals managed to gain a significant position in international platform indexes and constituted approximately (33%) of the academic output in the Middle East and around (2%) of the global scientific output, with medical research taking the largest share (Najari & Yousefvand, 2013).

- For the Turkish context, the goals have been set to link scientific research with direct local development through the encouragement of basic and foundational research to motivate competitiveness in its international dimension. Thus, the Turkish Higher Education Council (CHE) has adopted a model based on selecting existing universities that meet the criteria set according to the “Balanced Scorecard,” which contains 42 indicators to evaluate the performance of universities in various fields such as training, research, funding, internationalization, and even community service. These indicators include the number of doctoral students, scientific publications, patents, and adherence to environmental and social standards, with a focus on quality over quantity. This national approach of Turkey, based on contextual standards without compromising general scientific standards, has significantly enhanced the research efficiency of its universities. (Mammadov & Aypay, 2020).

- The Brazilian case is also important in the same aforementioned contexts of linking scientific research with developmental needs. One of the important fields is the agriculture sector, in which Brazil has made crucial strides, particularly in precision agriculture. A recent analytical study of research data spanning (25) years has shown that scientific production in the field of agriculture was not isolated from reality; rather, it was closely linked to it through experimental and then practical phases in the agricultural sector. This led to the introduction of new methods to modernize traditional agriculture by investing in sensing technologies and artificial intelligence for decision support, resulting in important outcomes such as increased soil productivity and reduced costs (Cherubin *et al.*, 2022).

This research movement which was primarily directed towards the Brazilian interior had a positive role in raising the level of Brazilian scientific research and then internationalizing it by increasing the number of journals indexed in the Web of Science database. (Vargas, Vanz, & Stumpf, 2014).

4. Towards a National evaluation system: Suggestions and recommendations

It is worth noting that drawing inspiration from the experiences of countries that have established themselves in the world of scientific publishing becomes a necessity to improve the context in Algeria. Thus, the necessity of building an independent academic publishing system with different local standards does not mean isolation from the world; rather, it means establishing different local foundations that take into account the needs of the national economy and societal peculiarities. This vision will encourage a positive investment perspective in the potentials and competencies of researchers, regardless of their differences and diversity.

In view of the foregoing analysis, the challenges discussed through this paper can be overcome through theoretical foundations, general practical procedures and multidimensional evaluation indicators. They can be summarized as follows:

- **Preparatory basics:** training selected reviewers, research laboratories and doctoral students on global governance techniques in all their details. This system will draw inspiration from the global system to establish its own local standards that respect the Algerian contexts and ensure quality and integrity. This should be done within a framework of rigorous scientific peer review based on academically recognized methodological and epistemological standards.

- **Research quality and its relevance to the needs and concerns of Algerian society:** evaluation of research should be based on its direct practical impact on society and its ability to solve the problems posed in their contexts, i.e., importance is given to the originality of the research, its methodology, and its results, which should be applicable in the local context as a priority.

- **Innovative vision:** research evaluation should consider indicators such as technology transfer, patents and value-added production in entrepreneurship can serve as the fundamental basis for diversity and uniqueness.

- **The language barrier:** the dominance of the English language in many fields may discourage many researchers and lead them to rely on low-quality translations, while research in their original language tends to be of higher quality in terms of communicative utility and visibility. Therefore, Publishing in Arabic alongside other languages should also be encouraged, as we cannot restrict publishing to English or French under the pretext of global publishing. Scientific publishing in Arabic should be valued by adding a language indicator in the local evaluation system, and researchers should be encouraged to translate their works into Arabic. Since one cannot talk about renaissance of a society without having science an integral part of daily life, because science that is not part of the community life cannot create a civilization (Mahmud, 1971)

- **Global connection/openness:** Algeria can connect the newly established system with Arab and global systems, by developing websites with API interfaces that allow data exchange with Arab databases such as Ma'arifa and ARCIF, and global ones like Scopus and Web of Science. And adopting standards inspired by the DORA Declaration and the Leiden Manifesto, focusing on the quality of research. This can solve the first problem faced by doctoral/Phd students, which is publishing as a fundamental condition for their defense. Inspiration is drawn from the Chinese example in evaluating and supporting research and creative talents among graduate students. Instead of the Algerian post-evaluation of theses or dissertations, , other criteria could be introduced such as published articles, conference participations and academic impact that attests to the researcher's authenticity, strength and creativity in the Academia, taking into consideration the institutional requirements, faculty qualifications, and the availability of human, material, and intellectual resources availability to the student (Pengjun, 2023).

- **A scoring system similar to the global system:** it can be adopted, taking into account national privacy and the challenges faced by researchers. The foundation of this is to implement a monitoring and follow-up system for innovative research and support it to represent national scientific research globally, while considering the quality of the research itself.

- **Citations and References:** The originality of ideas and the rights of authorship and patents will be preserved in a national unified database that can be referred to whenever one wants to track the origin of an idea.

- **Support for non-affiliated university research:** provide the publication opportunity for outside the university community: such as doctors, engineers, independent researchers, private economic institutions, provided that the research meets the academic and methodological standards.

Algeria's experience in implementing Total Quality Management (TQM) practices, Arabic Citation & Impact Factor (ARCIF) indexing and Algerian Scientific Journal Platform (ASJP) impact factor can be considered as great starting points and a solid foundation upon

which the system for evaluating research and academic publishing can be established. In this respect, these foundational structures have already achieved tangible results in enhancing the efficiency of administration and pedagogical management in Algerian universities and have received positive feedback from students, teaching committees, and pedagogical community (Yahiaoui *et al.*, 2022).

CONCLUSION

As a matter of fact, adopting global research evaluation standards without critical scrutiny of the context in which they were produced may not necessarily contribute to enhancing the quality or effectiveness of research within local environments. In addition, it may entrench a pattern of dependency in research perceptions and standards. Accordingly, ensuring knowledge sovereignty in Algeria requires building a national research and evaluation system and reinforces a unified database that serves as a basis for accurate scientific development. However, respecting global scientific standards does not contradict the development of national evaluation mechanisms that align with local knowledge priorities, and provides researchers with a broader margin to explore topics that may not receive attention in the global context, but are of central importance within national local contexts, mainly sociological, sociolinguistic and technical issues. True knowledge is not structured in a vacuum; it stems from society and its historical and cultural contexts, it reveals the national will in setting priorities and shaping the future.

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